

WHAT IS CLAIMED IS:

1. A method for previewing a MIB (Management Information Base) group table in a SNMP (Simple Network Management Protocol) network device, prior to enabling a NMS (Network Management Station) to read or set with respect to one of the MIB group tables in at least one SNMP network device, the method comprising:

transmitting a packet having preview facility from the NMS to the network device;

- after the network device has received the packet, transmitting items in the MIB group table which supports the SNMP back to the NMS in a reply packet; and

enabling the NMS to perform an analysis on the reply packet so as to preview items of the MIB group table in the network device which support SNMP.

2. The method of claim 1, wherein a transmission or receiving of the packet having preview facility is effected by the SNMP, and the packet has a format complied with a SNMP transmission or receiving rule and an OID (object identifier) string carried therewith which is an OID of the MIB group table.

3. The method of claim 2, wherein the OID string is an entry OID of the MIB group table.

4. The method of claim 1, wherein the reply packet has a PDU based format including a first field of PDU variable length and a second field of PDU variable bit string where the PDU variable length is an integer as contents at a head portion of a standard PDU, and the PDU variable bit string is a string of digit in a range of [1...N], where  $N \geq 1$ .

5. The method of claim 4, wherein the second field of PDU variable bit string comprises a plurality of cells for storing either 1 or 0, and wherein 1 represents an index in the MIB group table which truly supports the SNMP, and 0 represents

an index in the MIB group table which does not support the SNMP.

6. The method of claim 4, wherein the second field of PDU variable bit string comprises a plurality of cells for storing all of the indices which support the SNMP.

5 7. The method of claim 4, wherein the second field of PDU variable bit string comprises a plurality of cells for storing all of the indices which do not support the SNMP.

8. The method of claim 4, wherein the second field of PDU variable bit string comprises one byte for storing the indices in the MIB group table which support  
10 the SNMP, and wherein each bit of the byte represents an index and a bit corresponding to an index which supports the SNMP is set as 1.